

LISTING OF CLAIMS

Claim 1 (currently amended): A process for delivery of a water nanocluster composition through the outermost layer of human skin, comprising the steps of:

preparing a water nanocluster composition comprising pentagonal dodecahedral water nanoclusters having at least one dimension thereof being less than about 10 nanometers and an oil formulation in the form of a water-in-oil nano-emulsion wherein said water nanocluster composition is comprised of at least about 5% by weight water and said oil formulation is selected from the group consisting of cosmetic and pharmaceutical oils, and

applying said water nanocluster composition onto the outermost layer of human skin.

Claim 2 (previously presented): The process of Claim 1 wherein said water nanocluster composition further comprises one or more surfactants selected from the group consisting of fatty acids, ethoxylates and alcohols.

Claim 3 (previously presented): The process of Claim 2 wherein said water nanocluster composition is comprised of about 5 to 25% by weight surfactants.

Claim 4 (previously presented): The process of Claim 1 wherein said water nanocluster composition is comprised of 10-50% by weight water.

Claim 5 (previously withdrawn)

Claim 6 (previously withdrawn)

Claim 7 (previously presented): The process of Claim 1 wherein said oil formulation is a cosmetic oil formulation.

Claim 8 (previously presented): The process of Claim 7 wherein said water nanocluster composition is comprised of:

- (1) about 5 to 50% by weight water,
- (2) about 10 to 90% by weight of a cosmetic oil formulation and
- (3) about 5 to 50% by weight of one or more surfactants selected from the group consisting of fatty acids, ethoxylates and alcohols.

Claim 9 (previously presented): The process of Claim 1 wherein said water nanoclusters in said water nanocluster composition are present together with bulk water but constitute the predominant form of water present in said water nanocluster composition.

Claim 10 (previously presented): The process of Claim 1 wherein said oil formulation includes pharmaceutical ingredients.

Claim 11 (currently amended): A water-in-oil nano-emulsion composition comprised of:

- (1) about 5 to 50% by weight water containing pentagonal dodecahedral water nanoclusters having at least one dimension of less than about 10 nanometers,
- (2) about 10 to 90% by weight of an oil formulation, wherein said oil formulation is selected from the group consisting of cosmetic and pharmaceutical oils and
- (3) about 5 to 50% by weight of one or more surfactants selected from

the group consisting of fatty acids, ethoxylates and alcohols.

Claim 12 (previously withdrawn)

Claim 13 (previously withdrawn)

Claim 14 (previously withdrawn)

Claim 15 (previously presented): The composition of Claim 11 wherein said water cluster are in multi-water cluster arrays.

Claim 16 (previously presented): The composition of Claim 15 wherein said multi-water cluster arrays are needle-like in form, having at least one dimension less than about 1 nanometer and a second dimension greater than about 3 nanometers.

Claim 17 (previously presented): The composition of Claim 11 wherein said surfactants are clathrated by said water nanoclusters and extend therefrom resulting in reverse micelles of about 3 nanometers in diameter.

Claim 18 (previously presented): The composition of Claim 16 wherein said surfactants are linearly clathrated in the needle cavity resulting in cylindrically symmetric micelles with a large dimension of about 4 nanometers and a small dimension of about 0.8 nanometers.

Claim 19 (previously presented): The composition of Claim 11 wherein the said composition is in the form of a gel.

Claim 20 (previously presented): The composition of Claim 11 wherein the said composition is in the form of a cream.

Claim 21 (previously presented): The composition of Claim 11 wherein the said composition is in the form of a liquid.

Claim 22 (previously presented): The composition of Claim 1 wherein the oil formulation is a cosmetic oil formulation selected from the group consisting of soybean, peanut, olive, sesame and paraffin.

Claim 23 (previously presented): The composition of Claim 22 wherein said cosmetic oil formulation includes one or more additives selected from the group consisting of nutrients, fragrances and sunscreens, which are soluble in the cosmetic oil formulation.

Claim 24 (previously presented): The composition of Claim 11 wherein said oil formulation includes pharmaceutical ingredients.

Claim 25 (currently amended): A process for delivery of water nanocluster compositions through the outermost layer of human skin, comprising of steps of:

preparing a water nanocluster composition comprising water nanoclusters having at least one dimension thereof being between about 0.8 and about 10 nanometers and an oil formulation in the form of a water-in-oil nano-emulsion, wherein said water nanocluster composition is comprised of at least about 5% by weight water and said oil formulation is selected from the group consisting of cosmetic and pharmaceutical oils, and

applying said water nanocluster composition onto the outer most layer of human skin.

Claim 25 (currently amended): A water-in-oil nano-emulsion composition comprised of:

(1) about 5 to 50% by weight water containing water nanoclusters having at least one dimension between about 0.8 and about 10 nanometers,

(2) about 10 to 90% by weight of an oil formulation, wherein said oil formulation is selected from the group consisting of cosmetic and pharmaceutical oils and

(3) about 5 to 50% by weight of one or more surfactants selected from the group consisting of fatty acids, ethoxylates and alcohols.